WHAT IS CLAIMED IS:

1. A process for repetitively producing and removing coke from a delayed coker vessel, wherein the coker vessel has a bottom portion defining an aperture through which coke is released, comprising:

(a) Sealing an aperture closure housing to the bottom portion of the coker vessel;

(b) moving a closure member within the closure housing to close the aperture;

(c) feeding a heavy hydrocarbon feed into the coker vessel through a feed line attached to the coker vessel at a position above the bottom of the coker vessel;

(d) coking the heavy hydrocarbon in the coker vessel;

(e) moving the closure member within the closure housing to open the aperture to allow coke removal from the coker vessel; and

(f) releasing coke through the aperture, and;

(g) repeating steps c through f successively.

2. The process in of Claim 1 wherein step (c) further comprises attaching the feed line to the coker vessel at a side entry position.

3. The process in of Claim 1 wherein step (a) further comprises sealing a transition spool piece to the coker vessel bottom and attaching the feed line to the spool piece at a side entry position.

4. The process of Claim 1 wherein step (a) further comprises forming a seal between the aperture closure housing and the bottom portion of

the vessel wherein the seal withstands pressures within the vessel from atmospheric to 500 psi.

5. The process of Claim 4 wherein step (a) further comprises forming a seal between the aperture closure housing and the bottom portion of the vessel wherein the seal withstands vessel temperatures through repetitive coking/decoking cycles ranging from –50°F to 1000°F.

6. The process of Claim 1 wherein step (a) further comprises sealing a coke chute to a bottom portion of the aperture closure housing.

7. The process of Claim 1 wherein step (a) further comprises placing a gasket between the bottom portion of the vessel and closure unit and pressure-tightly joining the vessel bottom, the gasket and the closure unit.

8. The process of Claim 2 wherein step (a) further comprises placing a gasket between the bottom of the closure unit and the coke chute and pressure-tightly joining the closure unit, the gasket and the coke chute.

9. The process of Claim 7 or 8 wherein the gasket comprises an annular corrugated metal bonded to a graphite material.

10. A process in accordance with Claim 6 wherein the process further comprises using the chute to assist in directing coke removed from the coker vessel into a coke receiving area.

11. A process in accordance with Claim 1 wherein steps (b) and (e) further comprise moving the closure member by a powered actuator or a plurality of powered actuators.

12. The process of Claim 11 wherein said powered actuators are remotely actuated.

13. A process in accordance with Claim 1 wherein the coking step (d) is carried out at a temperature between 900°F and 1100°F, the opening step (e) is done at a temperature between -50°F and 110°F, and the valve is selected to withstand repeated operation at temperature cycling between step (d) and step (e).

14. A process in accordance with Claim 1 wherein the closure member of steps (b) and (e) is a valve.

15. A process in accordance with Claim 14 wherein the valve is selected from a gate valve, a ball valve, a slide valve, a knife valve or a wedge plug valve.

16. A process in accordance with Claim 1 wherein the aperture opens to a diameter between 30 and 90 inches.

17. A process in accordance with Claim 1 wherein the closure housing and closure member are mounted to a weight bearing structure selected from the group consisting of a gantry system and a trolley system.

18. The process of Claim 17 wherein the closure unit is laterally removable from the coker vessel by means of said weight bearing structure.

19. A coker vessel comprising:

(a) a vessel having a flanged side aperture and a flanged bottom aperture;

(b) a flanged feed pipe fitted to said flanged side aperture;

(c) an aperture closure unit fitted and sealed to said bottom aperture;

(d) a closure member moveable within said closure unit;

(e) A coke chute sealed to the bottom portion of the closure unit for directing coke from the vessel to a receiving area.

20. The coker vessel of Claim 19 wherein the closure member comprises a valve.

21. The coker vessel of Claim 20 wherein the valve is a gate valve, a ball valve, a slide valve, a knife valve or a wedge plug valve.

22. The coker vessel of Claim 20 wherein the valve further comprises a power actuated valve.

23. The coker vessel of Claim 20 wherein the bottom aperture is from 30 to 90 inches.